Monitoring Migratory Behavior of American Shad (*Alosa sapidissima*) in the James River, VA: Feasibility of Dredging Impact Assessment

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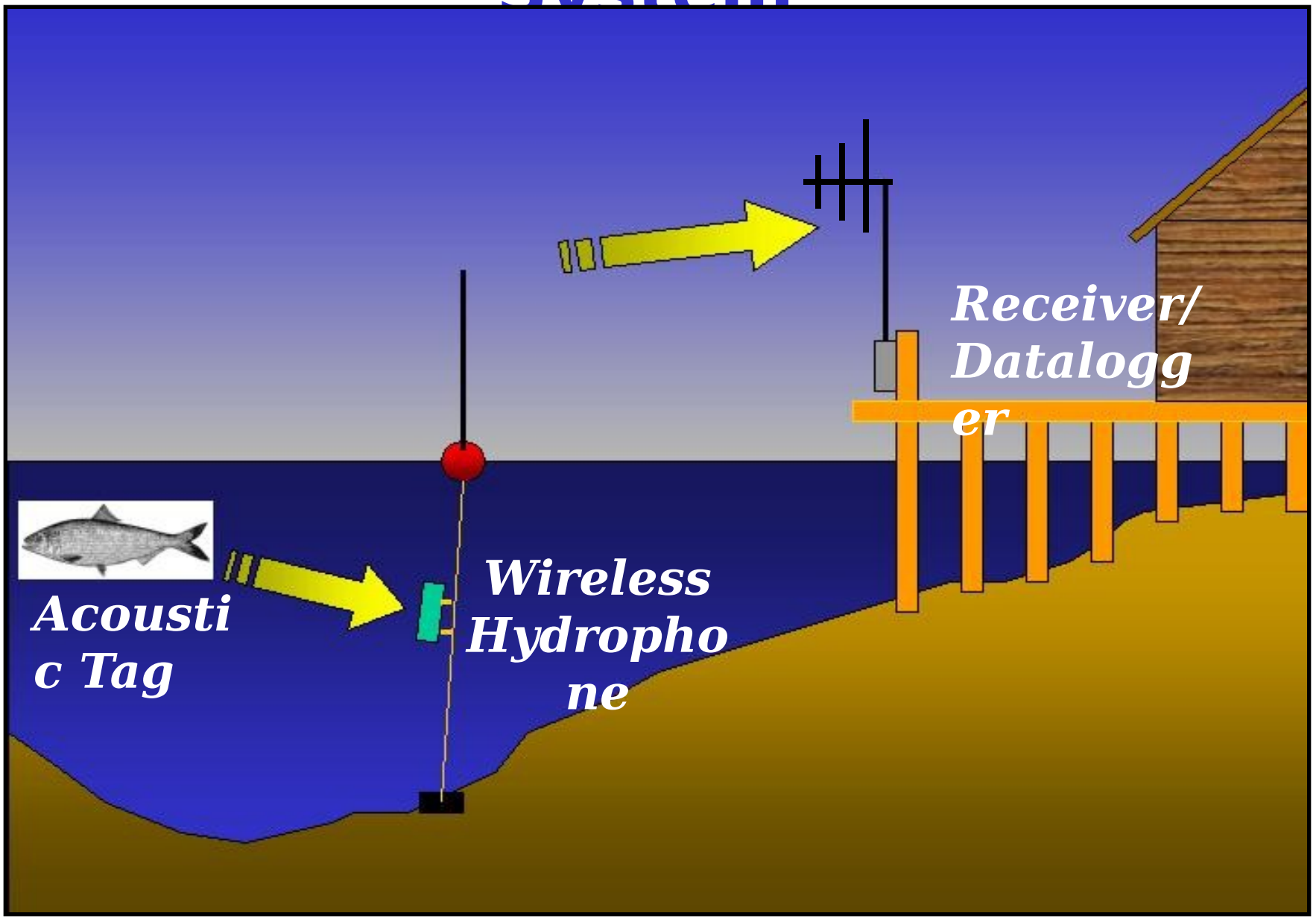
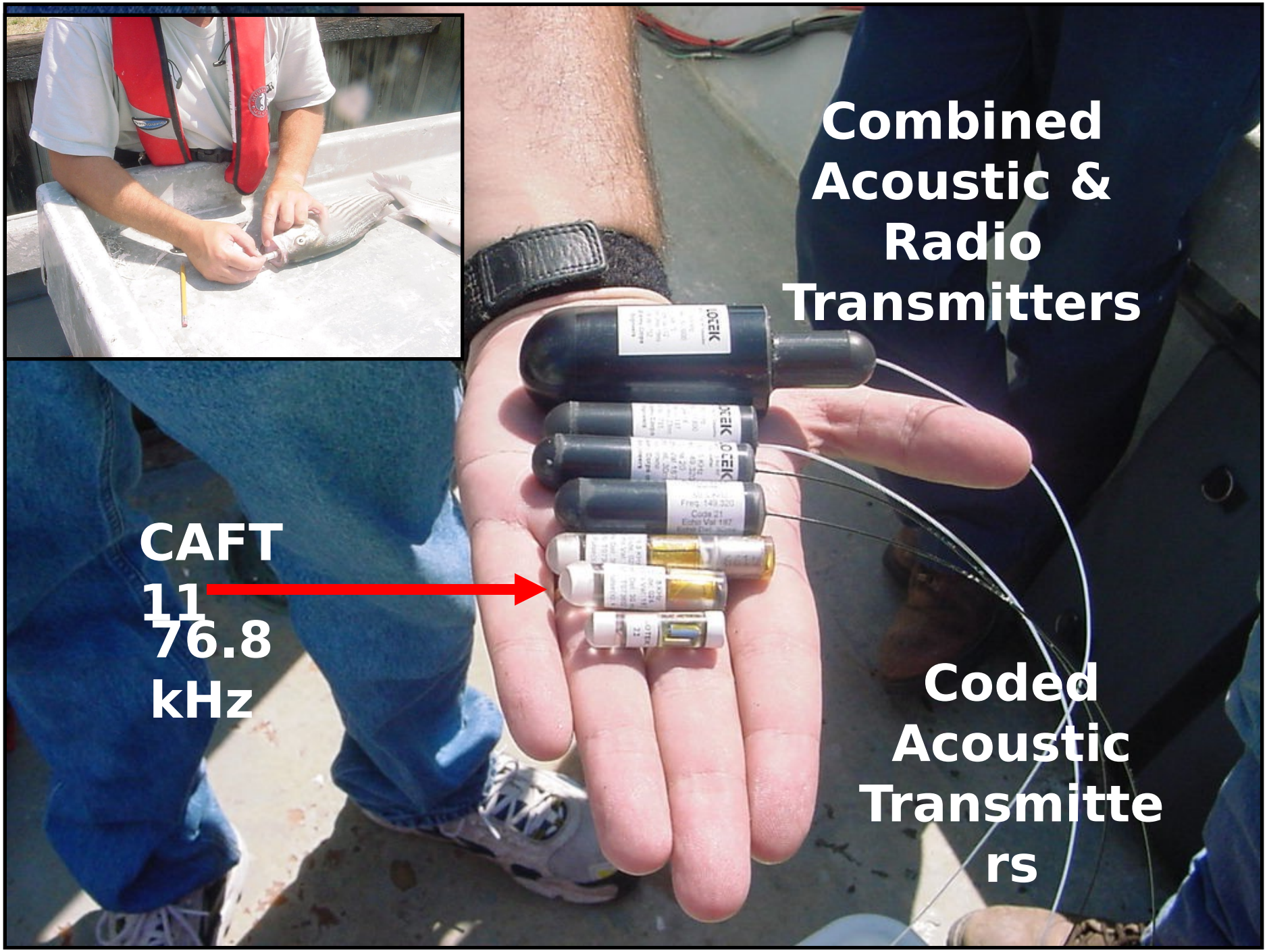
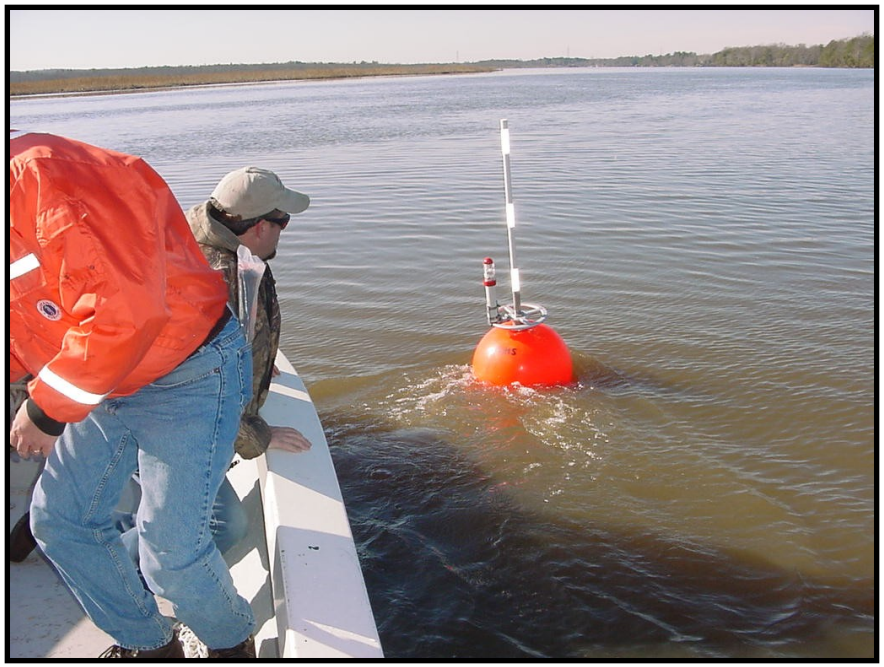
Summary Report for Anadromous Fish Studies in Goose Hill Channel and Turkey Island Cutoff on the James River

April 17, 2002

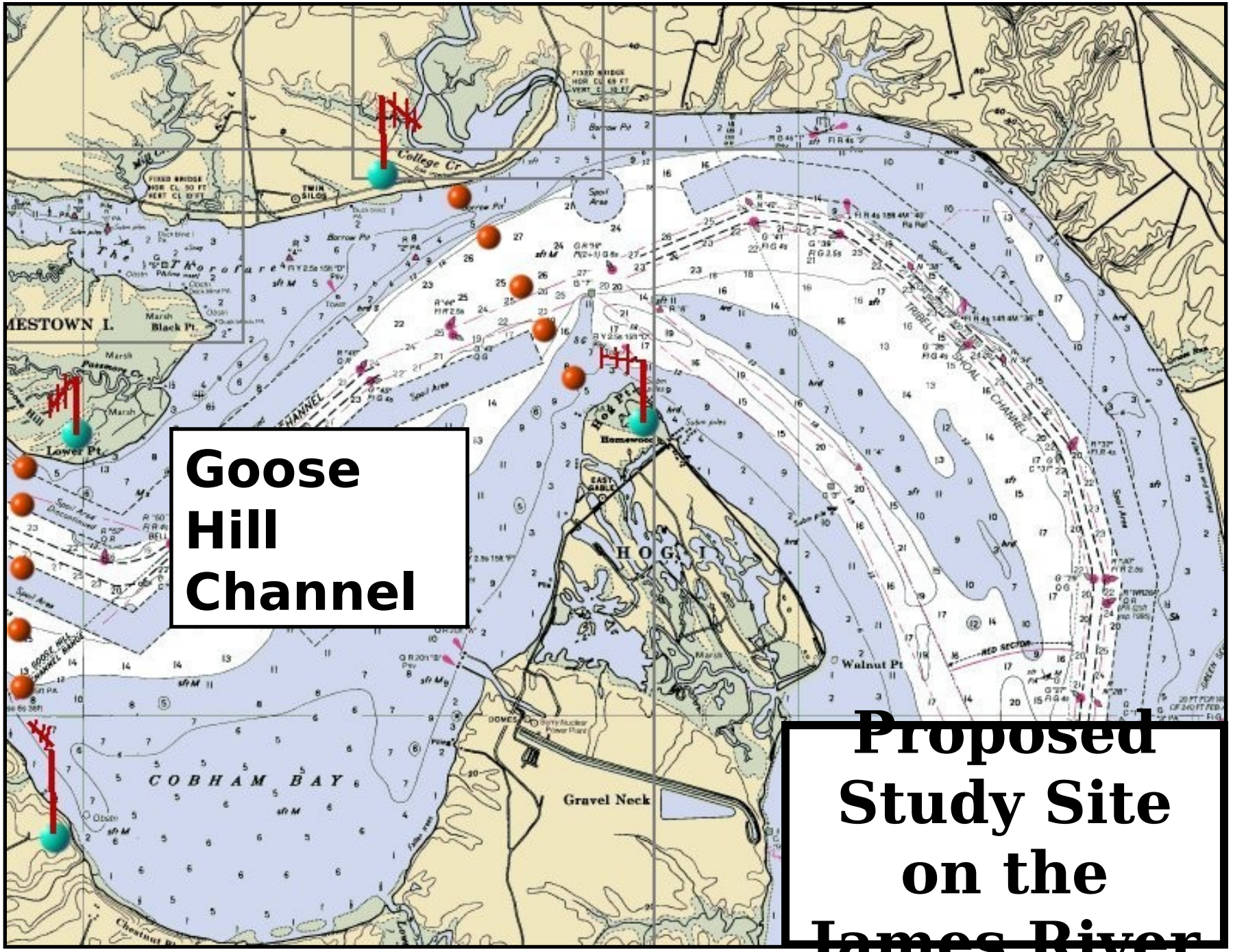
Lotek Biotelemetry System




Combined Acoustic & Radio Transmitters
CAFT 11 76.8 kHz
Coded Acoustic Transmitters



Onshore Monitoring and Recording Station


Goose Hill Channel
Proposed Study Site on the James River
College Cr
Lower Pt
Hog Pt
Homewood
HOG I
Walnut Pt
COBHAM BAY
Gravel Neck
Dominion Nuclear Power Plant
Spoil Area
Marsh
Black Pt
Jamestown I.

Study Objectives

- Evaluate effectiveness of catching and tracking American Shad in the James River.
- Refine methods for future tracking of shad when dredge is operating in the channel.

Primary Goal

- Establish if shad are affected by dredging operations.
  - If not, can restrictions be reduced to allow more time to dredge in the spring to better manage navigation requirements?